

CELOTEX

REG. U.S. PAT. OFF.

BUILDING PRODUCTS



ROOFING PRODUCTS *Section*
« *See INSULATION and ACOUSTICAL Sections* »



SPECIFICATION CHART FOR CELOTEX BONDED BUILT-UP ROOFS

PERIOD OF BOND IN YEARS	SPECIFICATION DESIGNATION	LIMITATIONS OF ROOF INCLINE IN INCHES PER FOOT	SURFACE FINISH	CONSTRUCTION	MATERIAL WEIGHT										WEIGHT PER SQUARE				PAGE NUMBER			
					Layers of Bitumen	Primer	Sheathing Paper	Base Sheet	Asphalt Felt	Tarred Felt	19/UP Construction	Cap Sheet	Asphalt	Pitch	Gravel	Slag	Smooth	Mineral Surfaced		Gravel Surfaced	Slag Surfaced	Underwriters' Classification
SPECIFICATIONS FOR WOOD OR PRECAST GYPSUM DECKS																						
20	WA-20G	¼ up to 3	Gravel or slag	One 30-lb. felt (asphalt) Three 15-lb. felts (asphalt)	4			32	49				140		400	300		621	521	A	4	
20	WP-20G	¼ up to 2	Gravel or slag	Five 15-lb. felts (tar) One sheathing paper	4	5			81					150	400	300		636	536	A	4	
15	WA-15G	¼ up to 3	Gravel or slag	One 30-lb. felt (asphalt) Two 15-lb. felts (asphalt)	3			32	32				110		400	300		574	474	A	4	
15	WP-15G	¼ up to 2	Gravel or slag	Four 15-lb. felts (tar) One sheathing paper	3	5			65					125	400	300		595	495	A	4	
15	WA-15NU	3 up to 12	Mineral	Three 15-lb. felts (asphalt) 19/UP Construction	4				49		110	120						279		C	4	
10**	WA-10G	3 up to 6	Gravel or slag	Five 15-lb. felts (asphalt)	5				81			125		325	250			531	456	C	4	
10	WA-10CS	¾ up to 3	Cap sheet	One 32-lb. base sheet Two 15-lb. felts One 34-lb. cap sheet	3		32	32			34	90					191			C	5	
10	WA-10NU	3 up to 12	Mineral	Two 15-lb. felts (asphalt) 19/UP Construction	2				32		110	60						202		C	5	

**Write The Celotex Corporation for Special Specifications should 20 year bond be required.

SPECIFICATIONS FOR NON-COMBUSTIBLE DECKS

20	CA-20G	1/4 up to 3	Gravel or slag	Four 15-lb. felts (asphalt)	5	9		65				180		400	300		654	554	A	5	
20	CP-20G	1/4 up to 2	Gravel or slag	Four 15-lb. felts (tar)	5				65				200	400	300		665	565	A	5	
15	CA-15G	1/4 up to 3	Gravel or slag	Three 15-lb. felts (asphalt)	4	9		49				150		400	300		608	508	A	5	
15	CP-15G	1/4 up to 2	Gravel or slag	Three 15-lb. felts (tar)	4				49				175	400	300		624	524	A	5	
15	CA-15NU	3 up to 9	Mineral	Two 15-lb. felts (asphalt) 19/UP Construction	4	9		32		110		120					271		C	6	
10**	CA-10G	3 up to 6	Slag or gravel	Four 15-lb. felts (asphalt)	5	9		65				125		325	250		624	449	C	6	
10	CA-10CS	3/4 up to 3	Cap Sheet	Three 15-lb. felts One 34-lb. cap sheet	4	9		49			34	120				212			C	6	
10	CA-10NU	3 up to 9	Mineral	One 15-lb. felt (asphalt) 19/UP Construction	3	9		15		110		90					224		C	6	

**Write The Celotex Corporation for Special Specifications should 20 year bond be required.

Specifications for non combustible decks may also be used over steel decks having 1/2 in. roof insulation, or over rigid roof insulation, provided nailing strips are used on inclines over 3 in. to the foot.

SPECIFICATIONS FOR OVER CONCRETE AND UNDER PROMENADE TILE

10	CA-10T	Up to 1	Tile	Five 15-lb. felts (asphalt)	6	9		81				180									6	
10	CP-10T	Up to 1	Tile	Five 15-lb. felts (tar)	6				81			200					270				6	

Note: Specifications for use in the eleven western states are different from above, and can be obtained from offices of Celotex Corporation. No bonds are issued in Pacific Coast area. Slag or gravel surfaced roofs are recommended for use in or south of the states of South Carolina, Georgia, Tennessee, Arkansas and Oklahoma, as we will not bond smooth surfaced asphalt roofs in that area. Subject to change without notice.

Specifications for Celotex Traffic Top, "The Resilient Promenade Surfacing."

Note: Celotex Traffic Top is applied only by our Approved Distributors. Specifications are available on request.



THE CELOTEX CORPORATION



• 919 • NORTH • MICHIGAN • AVENUE • CHICAGO • ILLINOIS •

Foreword

EXPERIENCE—Over the years involved in building up the preeminence of Celotex Cane Fibre Products in the structural insulation field, roofing, waterproofing, dampproofing, and vaporproofing problems have been presented in many forms by various branches of the building industry for solution. Engineering Research and Construction Service Departments of the Celotex Corporation cooperated with the building industry generally in solving such problems, and in this work, Celotex has developed many standards that have been put into general practice, and has also produced new products in this field which have found immediate acceptance by architects, engineers, owners, general contractors, and roofers as valuable refinements and developments of good roofing practices.

ENGINEERING SERVICES BY ROOFING ENGINEERS—The Celotex Corporation is prepared to furnish definite recommendation as to the correct type of roof to be used with any type of construction. Any special problem may be referred to them with assurance of cooperation.

BOND FOR BUILT-UP ROOF AND FLASHINGS—If a Celotex Bond is required, the roof shall be inspected by an authorized Celotex inspector. Such bonds will be given only when the roof is laid by a Celotex approved Built-up Roofer in strict accordance with specifications.

Celotex Standard Flashing Specifications used in conjunction with a bonded roof specification will carry a flashing endorsement for a period of years corresponding to the type of flashing used.

TYPES AND FINISHES OF BUILT-UP ROOFS—Celotex specifications have been made complete by incorporating the following types of built-up roofing construction, each for a specified term of years:

- (1) Smooth Surfaced Asphalt Roofs, (2) Gravel or Slag Surfaced Asphalt Roofs, (3) Crushed Slate Surfaced Asphalt Roofs, (4) Coal Tar Felt and Pitch Roofs.

All of the above roofs will be bonded if desired.

ABBREVIATED ROOFING DESIGNATIONS—In the table on page 2 and the Built-up Roofing Specification on pages 4, 5, and 6 the following letters and numbers apply. The first letter indicates the type of deck—W for wood, C for concrete or other non-combustible materials; the second letter indicates the bitumen—A for asphalt, P for pitch; the number denotes the period of bond; the last letter indicates the type of surface—G for gravel, NU for 19/UP, CS for cap sheet, T for tile.

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CELOTEX ROOFING PRODUCTS

ASPHALT SHINGLES

Celotex Shad-O-Grain Shingles
 Celotex Three-Tab Edgeseal Shingles
 Celotex Three-Tab Jumbo Shingles
 Celotex Thick-Butt Shingles
 Celotex Ver-Style Shingles
 Celotex Cut-Out Shingles
 Celotex Standard Hexagonal Shingles
 Celotex Hexagonal Slab Shingles
 Celotex Double Coverage Hexagonal Shingles
 Celotex Lok-Lay Shingles
 Celotex Hex-Lox Shingles
 Celotex Self-Spacing Individual Shingles
 Celotex Hip and Ridge Shingles
 Celotex Dutch Lap Shingles

ASPHALT SIDINGS

Celotex Brik-face Edgeseal Siding
 Celotex Brik-face Edgeseal Corners
 Celotex Soldier Course Brik-face Edgeseal Siding
 Celotex Brik-face Thick-Butt Siding
 Celotex Brik-face Thick-Butt Corners
 Celotex Brik-face Starter Strips
 Celotex Four Point Hex Siding

MINERAL SURFACED ROLL ROOFINGS

Celotex (Mineral Rolls)
 Celotex 19/UP Roofing
 Celotex Blockedge
 Celotex Diamond Point
 Celotex Starter and Valley Strips

SMOOTH SURFACED ROLL ROOFINGS

Celotex Super-Grade
 Celotex (Regular)
 Servall
 Solar
 Celotex Coated Sheathing Felt
 Celotex Cap Sheet Roofing
 Celotex Black and White Cap Sheet Roofing

FELTS, BUILDING PAPERS, ETC.

Celotex Tarred Felt
 Celotex Asphalt Felt
 Celotex Slaters Felt
 Celotex Asphalt Sheathing Paper
 Celotex Tarred Sheathing Paper
 Celotex Threaded Felt
 Celotex Insulating Paper
 Celotex Deadening Felt
 Celotex Sheathing Papers—Red or Gray
 Celotex Sheathing Paper—Blue
 Celotex Blue Plasterboard

ROOF COATINGS AND CEMENTS

Celotex Asphalt Roof Coating—Black
 Solar Asphalt Roof Coating—Black
 Celotex Asbestos Roof Coating—Black
 Solar Asbestos Roof Coating—Black
 Celotex 19/UP Cement
 Celotex Lap Cement
 Celotex Plastic Cement—Black
 Solar Plastic Cement—Black
 Celotex Refined Tar
 Celotex Super Lap Cement
 Celotex Pitch Black Paint
 Celotex Asphalt Primer

CELOTEX BUILT-UP ROOFING **OVER WOOD OR PRECAST GYPSUM DECKS**

SPECIFICATION WA-20G

TYPE—Slag or Gravel Surface Celotex Asphalt Saturated Felts, Asphalt.

DECK—Wood (or precast gypsum).

INCLINE— $\frac{1}{4}$ in. up to 3 in. per foot.

CLASSIFICATION—Underwriters' "A."

INSERT UNDER "ROOFING"—Built-up roofing shall be Celotex Specification WA-20G applied as follows and subject to the Celotex detailed specification and requirements. Apply a Celotex 30-lb. Asphalt Saturated Felt (or two layers of 15-lb. Celotex Asphalt Saturated Felt lapped 19 in.) laid dry and nailed. Over this base apply three layers of 15-lb. Celotex Asphalt Saturated Felt in shingle construction lapped $24\frac{3}{4}$ in. and solidly cemented to base sheet, and between plies with Celotex Roofing Asphalt. Coat surface with a heavy pouring of Celotex Roofing Asphalt and embed 400 lbs. of gravel or 300 lbs. of slag per square.

FLASHING—A Celotex standard flashing shall be used.

BOND—A bond covering performance of roofing shall be furnished for a period of 20 years.

SPECIFICATION WP-20G

TYPE—Slag or Gravel Surface Celotex Tarred Felts, Celotex Coal Tar Pitch.

DECK—Wood (or precast gypsum).

INCLINE— $\frac{1}{4}$ in. up to 2 in. per foot.

CLASSIFICATION—Underwriters' "A."

INSERT UNDER "ROOFING"—Built-up Roofing shall be Celotex Specification WP-20G applied as follows and subject to Celotex detailed specification and requirements. Apply one layer of sheathing paper and over this apply two layers of Celotex 15-lb. Tarred Felt laid dry in shingle construction, lapped 17 in. and nailed. Over these dry felts apply three additional layers of Celotex 15-lb. Tarred Felts in shingle construction, lapped 22 in. and solidly cemented between and to the underlying felt with Celotex Roofing Pitch. Coat surface with a heavy pouring of Celotex Roofing Pitch and embed 400 lbs. of gravel or 300 lbs. of slag.

FLASHING—A Celotex standard flashing shall be used.

BOND—A bond covering performance of roofing shall be furnished for a period of 20 years.

SPECIFICATION WA-15G

TYPE—Slag or Gravel Surface Celotex Asphalt Saturated Felts, Asphalt.

DECK—Wood (or precast gypsum).

INCLINE— $\frac{1}{4}$ in. up to 3 in. per foot.

CLASSIFICATION—Underwriters' "A."

INSERT UNDER "ROOFING"—Built-up roofing shall be Celotex Specification WA-15G applied as follows and subject to the Celotex detailed specification and requirements. Apply a Celotex 30-lb. Asphalt Saturated Base Felt (or two layers of Celotex 15-lb. Asphalt Saturated Felt, lapped 19 in.) laid dry and nailed. Over this base apply two layers of Celotex 15-lb. Asphalt Saturated Felt in shingle construction, lapped 19 in., and solidly cemented to base sheet and between plies with Celotex Roofing Asphalt. Coat surface with a heavy pouring of Celotex Roofing Asphalt and embed 400 lbs. of gravel or 300 lbs. of slag per square.

FLASHING—A Celotex standard flashing shall be used.

BOND—A bond covering performance of roofing shall be furnished for a period of 15 years.

SPECIFICATION WP-15G

TYPE—Slag or Gravel Surface Celotex Tarred Felts, Celotex Coal Tar Pitch.

DECK—Wood (or precast gypsum).

INCLINE— $\frac{1}{4}$ in. up to 2 in. per foot.

CLASSIFICATION—Underwriters' "A."

INSERT UNDER "ROOFING"—Built-up roofing shall be Celotex Specification WP-15G applied as follows and subject to the Celotex detailed specification and requirements. Apply one layer of sheathing paper and over this apply two layers of Celotex 15-lb. Tarred Felts laid dry in shingle construction, lapped 17 in. and nailed. Over these dry felts apply two additional layers of Celotex 15-lb. Tarred Felts in shingle construction, lapped 17 in., and solidly cemented between and to the underlying felt with Celotex Roofing Pitch. Coat surface with a heavy pouring of Celotex Roofing Pitch and embed 400 lbs. of gravel or 300 lbs. of slag per square.

FLASHING—A Celotex standard flashing shall be used.

BOND—A bond covering performance of roofing shall be furnished for a period of 15 years.

SPECIFICATION WA-15NU

TYPE—Mineral Surface Celotex 19/UP Construction Asphalt Saturated Felts, Celotex Roofing Asphalt or 19/UP cement.

DECK—Wood (or precast gypsum).

INCLINE—3 in. up to 12 in. per foot.

CLASSIFICATION—Underwriters' "C."

INSERT UNDER "ROOFING"—Built-up roofing shall be Celotex Specification WA-15NU applied as follows and subject to the Celotex detailed specification and requirements. Apply one layer of Celotex 15-lb. Asphalt Saturated Felt laid dry and nailed. Over this felt apply two additional layers of Celotex 15-lb. Asphalt Saturated Felt lapped 19 in. and cemented solidly to the first felt and to each other with Celotex Roofing Asphalt or 19/UP. Over these felts apply Celotex 19/UP Roofing in two layers solidly cemented to each other and to the underlying felt with Celotex Roofing Asphalt or 19/UP cement.

FLASHING—A Celotex standard flashing shall be used.

BOND—A bond covering performance of roofing shall be furnished for a period of 15 years.

SPECIFICATION WA-10G

TYPE—Slag or Gravel Surface Celotex Asphalt Saturated Felts, Celotex Roofing Asphalt.

DECK—Wood (or precast gypsum).

INCLINE—3 in. up to 6 in. per foot.

CLASSIFICATION—Underwriters' "C."

INSERT UNDER "ROOFING"—Built-up roofing shall be Celotex Specification WA-10G applied as follows and subject to the Celotex detailed specification and requirements. Apply five layers of Celotex 15-lb. Asphalt Saturated Felts in shingle construction, lapped $29\frac{1}{4}$ in., nailed as specified and cemented solidly between laps for a distance of 25 in. with Celotex Roofing Asphalt. Coat surface with a heavy pouring of Celotex Roofing Asphalt and embed 325 lbs. of gravel or 250 lbs. of slag per square.

FLASHING—A Celotex standard flashing shall be used.

BOND—A bond covering performance of roofing shall be furnished for a period of 10 years.

NOTE: A similar type of specification is available for a 20 year bond period.

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OVER WOOD OR PRECAST GYPSUM DECKS — CONTINUED

SPECIFICATION WA-10CS

TYPE—Smooth Surface 34-lb. Celotex Cap Sheet, Celotex Asphalt Saturated Felts, Celotex Roofing Asphalt.

DECK—Wood (or precast gypsum).

INCLINE— $\frac{3}{4}$ in. up to 3 in. per foot.

CLASSIFICATION—Underwriters' "C."

INSERT UNDER "ROOFING"—Built-up roofing shall be Celotex Specification WA-10CS applied as follows and subject to the Celotex detailed specification and requirements. Apply one layer of Celotex 34-lb. base sheet laid dry and nailed. Over this felt apply two layers of Celotex 15-lb. Asphalt Saturated Felt, lapped 19 in. and solidly cemented together to the underlying felt with Celotex Roofing Asphalt. Over these felts apply one layer of Celotex 34-lb. Cap Sheet, lapped 6 in., and solidly cemented with Celotex Roofing Asphalt.

FLASHING—A Celotex standard flashing shall be used.

BOND—A bond covering performance of roofing shall be furnished for a period of 10 years.

NOTE: Bond on this specification not issued in or south of the states of South Carolina, Georgia, Tennessee, Arkansas and Oklahoma.

SPECIFICATION WA-10NU

TYPE—Mineral Surfaced Celotex 19/UP Construction, Celotex Asphalt Saturated Felts, Celotex Roofing Asphalt, 19/UP Cement.

DECK—Wood (or precast gypsum).

INCLINE—3 in. up to 12 in. per foot.

CLASSIFICATION—Underwriters' "C."

INSERT UNDER "ROOFING"—Built-up roofing shall be Celotex Specification WA-10NU applied as follows, subject to the Celotex detailed specification and requirements. Apply two layers of Celotex 15-lb. Asphalt Saturated Felt laid dry, lapped 19 in. and nailed. Over these felts apply Celotex 19/UP Roofing in two layers solidly cemented between and to the underlying felt with Celotex Roofing Asphalt or 19/UP cement.

FLASHING—A Celotex standard flashing shall be used.

BOND—A bond covering performance of roofing shall be furnished for a period of 10 years.

CELOTEX BUILT-UP ROOFING

OVER NON-COMBUSTIBLE DECKS

SPECIFICATION CA-20G

TYPE—Slag or Gravel Surface Celotex Asphalt Saturated Felts, Asphalt.

DECK—Non-combustible (poured or precast concrete, poured gypsum or book tile).

INCLINE—From $\frac{1}{4}$ in. up to 3 in. per foot, (wood nailing strips on 4 ft. centers required on inclines over 2 in. per foot unless deck allows nailing).

CLASSIFICATION—Underwriters' "A."

INSERT UNDER "ROOFING"—Built-up roofing shall be Celotex Specification CA-20G applied as follows and subject to the Celotex detailed specification and requirements. (Prime gypsum decks with Celotex Asphalt Primer) then mop all decks with Celotex Roofing Asphalt. Apply four layers of Celotex 15-lb. Asphalt Saturated Felt laid in shingle construction, lapped 27 $\frac{1}{2}$ in. and solidly cemented with Celotex Roofing Asphalt. Coat surface with heavy pouring of Celotex Roofing Asphalt and embed 400 lbs. of gravel or 300 lbs. of slag per square.

FLASHING—A Celotex standard flashing shall be used.

BOND—A bond covering performance of roofing shall be furnished for a period of 20 years.

SPECIFICATION CA-15G

TYPE—Slag or Gravel Surface Celotex Asphalt Saturated Felts, Asphalt.

DECK—Non-combustible (poured or precast concrete, poured gypsum or book tile).

INCLINE—From $\frac{1}{4}$ in. up to 3 in. per foot (wood nailing strips on 4-ft. centers required on inclines over 2 in. per foot unless deck allows nailing).

CLASSIFICATION—Underwriters' "A."

INSERT UNDER "ROOFING"—Built-up roofing shall be Celotex Specification CA-15G laid as follows and subject to the Celotex detailed specification and requirements. (Prime gypsum decks with Celotex Asphalt Primer) then mop all decks with Celotex Roofing Asphalt. Apply three layers of Celotex 15-lb. Asphalt Saturated Felts in shingle construction, lapped 24 $\frac{3}{4}$ in. and solidly cemented with Celotex Roofing Asphalt. Coat surface with heavy pouring of Celotex Roofing Asphalt and embed 400 lbs. of gravel or 300 lbs. of slag per square.

FLASHING—A Celotex standard flashing shall be used.

BOND—A bond covering performance of roofing shall be furnished for a period of 15 years.

SPECIFICATION CP-20G

TYPE—Slag or Gravel Surface Celotex Tarred Felts, Celotex Coal Tar Pitch.

DECK—Non-combustible (poured or precast concrete, poured gypsum or book tile).

INCLINE—From $\frac{1}{4}$ in. up to 1 in. per foot on poured or precast concrete or book tile; from $\frac{1}{4}$ in. up to 2 in. per foot on poured gypsum.

CLASSIFICATION—Underwriters' "A."

INSERT UNDER "ROOFING"—Built-up roofing shall be Celotex Specification CP-20G applied as follows and subject to the Celotex detailed specification and requirements. Apply four layers of Celotex 15-lb. Tarred Felts in shingle construction, lapped 24 $\frac{1}{2}$ in. and solidly cemented with Celotex Roofing Pitch. Coat surface with heavy pouring of Celotex Roofing Pitch and embed 400 lbs. of gravel or 300 lbs. of slag per square.

FLASHING—A Celotex standard flashing shall be used.

BOND—A bond covering performance of roofing shall be furnished for a period of 20 years.

SPECIFICATION CP-15G

TYPE—Slag or Gravel Surfaced Celotex Tarred Felts, Celotex Coal Tar Pitch.

DECK—Non-combustible (poured or precast concrete, poured gypsum or book tile).

INCLINE—From $\frac{1}{4}$ in. up to 1 in. per foot on poured or precast concrete or book tile; from $\frac{1}{4}$ in. up to 2 in. per foot on poured gypsum.

CLASSIFICATION—Underwriters' "A."

INSERT UNDER "ROOFING"—Built-up roofing shall be Celotex Specification CP-15G laid as follows and subject to the Celotex detailed specification and requirements. Apply three layers of Celotex 15-lb. Tarred Felts in shingle construction, lapped 22 in. and solidly cemented with Celotex Roofing Pitch. Coat surface with heavy pouring of Celotex Roofing Pitch and embed 400 lbs. of gravel or 300 lbs. of slag per square.

FLASHING—Celotex standard flashing shall be used.

BOND—A bond covering performance of roofing shall be furnished for a period of 15 years.

OVER NON-COMBUSTIBLE DECKS — CONTINUED

SPECIFICATION CA-15NU

TYPE—Mineral Surfaced Celotex 19/UP Construction Asphalt Saturated Felts, Celotex Roofing Asphalt or 19/UP Cement.

DECK—Non-combustible (poured concrete or poured gypsum).

INCLINE—3 in. up to 9 in. per foot (on inclines over 4 in. to the foot, provisions should be made for nailing).

CLASSIFICATION—Underwriters' "C."

INSERT UNDER "ROOFING"—Built-up roofing shall be Celotex Specification CA-15NU laid as follows and subject to the Celotex detailed specification and requirements. (Prime gypsum decks with Celotex Asphalt Primer) then coat decks with Celotex Roofing Asphalt. Apply two layers of Celotex 15-lb. Asphalt Saturated Felt lapped 19 in., and solidly cemented in Celotex Roofing Asphalt or 19/UP Cement. Over these felts apply Celotex 19/UP Roofing in two layers, solidly cemented between and to each other with Celotex Roofing Asphalt or 19/UP cement.

FLASHING—A Celotex standard flashing shall be used.

BOND—A bond covering performance of roofing shall be furnished for a period of 15 years.

SPECIFICATION CA-10CS

TYPE—Smooth Surface 34-lb. Celotex Cap Sheet, Celotex Asphalt Saturated Felts, Celotex Roofing Asphalt.

DECK—Non-combustible (poured concrete or poured gypsum).

INCLINE—¾ in. up to 3 in. per foot (wood nailing strips on 4 ft. centers required on inclines over 2 in. per foot unless surface of deck allows nailing).

CLASSIFICATION—Underwriters' "C."

INSERT UNDER "ROOFING"—Built-up roofing shall be Celotex Specification CA-10CS applied as follows and subject to the Celotex detailed specification and requirements. (Prime gypsum decks with Celotex Asphalt Primer) then mop all decks with Celotex Roofing Asphalt. Apply three layers of Celotex 15-lb. Asphalt Saturated Felts, lapped 24¾ in. and solidly cemented with Celotex Roofing Asphalt. Over these felts apply one layer of Celotex 34-lb. Cap Sheet, lapped 6 in., and solidly cemented with Celotex Roofing Asphalt.

FLASHING—A Celotex standard flashing shall be used.

BOND—A bond covering performance of roofing shall be furnished for a period of 10 years.

NOTE: Bond on this specification not issued in or south of the states of South Carolina, Georgia, Tennessee, Arkansas and Oklahoma.

SPECIFICATION CA-10G

TYPE—Slag or Gravel Surface Celotex Asphalt Saturated Felts, Celotex Roofing Asphalt.

DECK—Non-combustible.

INCLINE—3 in. up to 6 in. per foot (provision to be made for nailing).

CLASSIFICATION—Underwriters' "C."

INSERT UNDER "ROOFING"—Built-up roofing shall be Celotex Specification CA-10G laid as follows, subject to the Celotex detailed specification and requirements. (Prime gypsum decks with Celotex Asphalt Primer) then mop all decks with Celotex Roofing Asphalt and apply four layers of Celotex 15-lb. Asphalt Saturated Felt, lapped 27½ in. solidly cemented with Celotex Roofing Asphalt. Coat surface with a heavy pouring of Celotex Roofing Asphalt and embed with 325 lbs. of gravel or 250 lbs. of slag per square.

FLASHING—A Celotex standard flashing shall be used.

BOND—A bond covering performance of roofing shall be furnished for a period of 10 years.

NOTE: A similar type of specification is available for 20 year bond.

SPECIFICATION CA-10NU

TYPE—Mineral Surfaced Celotex 19/UP Construction Celotex Asphalt Saturated Felts, Celotex Roofing Asphalt or 19/UP Cement.

DECK—Non-combustible (poured concrete or poured gypsum).

INCLINE—3 in. up to 9 in. per foot (on inclines over 4 in. to the foot, provision should be made for nailing).

CLASSIFICATION—Underwriters' "C."

INSERT UNDER "ROOFING"—Built-up roofing shall be Celotex Specification CA-10NU laid as follows and subject to the Celotex detailed specification and requirements. (Prime gypsum decks with Celotex Asphalt Primer) then mop all decks with Celotex Roofing Asphalt. Apply one layer of Celotex 15-lb. Asphalt Saturated Felt, solidly cemented with Celotex Roofing Asphalt or 19/UP Cement. Over this Felt apply Celotex 19/UP Roofing in two layers, solidly cemented between and to the underlying felt with Celotex Roofing Asphalt or 19/UP Cement.

FLASHING—A Celotex standard flashing shall be used.

BOND—A bond covering performance of roofing shall be furnished for a period of 10 years.

CELOTEX BUILT-UP ROOFING OVER CONCRETE AND UNDER PROMENADE TILE

SPECIFICATION CA-10T

TYPE—Celotex Asphalt Saturated Felts and Celotex Roofing Asphalt.

DECK—Concrete.

INCLINE—Not over 1 in. per foot.

INSERT UNDER "ROOFING"—Built-up roofing under Promenade Tile shall be a Celotex Specification CA-10T applied as follows and subject to the Celotex detailed specification and requirements. Apply five layers of Celotex 15-lb. Asphalt Saturated Felts in two, two and one ply construction, solidly cemented to the deck and between the sheets with Celotex Roofing Asphalt and surfaced with a heavy coating of Celotex Roofing Asphalt.

FLASHING—Special Celotex Flashing for Tile Decks shall be installed in accordance with specifications and requirements of The Celotex Corporation.

BOND—A bond covering performance of roofing shall be furnished for a period of 10 years.

SPECIFICATION CP-10T

TYPE—Celotex Tarred Felts and Celotex Coal Tar Pitch.

DECK—Concrete.

INCLINE—Not over 1 in. per foot.

INSERT UNDER "ROOFING"—Built-up roofing under Promenade Tile shall be Celotex Specification CP-10T applied as follows and subject to the Celotex detailed specification and requirements. Apply five layers of Celotex 15-lb. Tarred Felt in two, two and one ply construction, solidly cemented with Celotex Roofing Pitch and surfaced with a heavy coating of Celotex Roofing Pitch.

FLASHING—Special Celotex Flashing for Tile Decks shall be installed in accordance with specifications and requirements of The Celotex Corporation.

BOND—A bond covering performance of roofing shall be furnished for a period of 10 years.



GENERAL INFORMATION AND SUGGESTIONS

CELOTEX ROOF INSULATION

FOR PHYSICAL CHARACTERISTICS OF FIBRE INSULATION
INCLUDING CELOTEX ROOF INSULATION, SEE CELOTEX INSULATION CATALOG

Celotex brand Roof Insulation is a cane fibre product Roof Insulation especially designed for the insulation of roofs under built-up roofing, slate or tile roofs. It provides a highly desirable surface for mopping with asphalt or pitch. The firm support provided for the roof covering by Celotex Roof Insulation guards the finished roof surface from damage by mechanical abrasion or traffic.

In order to obtain the best results, the following supplementary directions covering work to be done by contractors other than the roofer should be considered in preparing the architect's specifications.

SHEET METAL WORK

Roof insulation warrants the installation of the very best type of flashing construction. It is important that insulation be protected from the elements.

Where skylight curbs, monitor curbs, saw-tooth curbs or the like are to be flashed, it is important that a condensation drip pan flashing of metal be provided under the sill of the sash frame, in order to expel any moisture that may form on the back of the glass, thus protecting the roofing and the underlying layers of insulation.

Where hanging gutters are used the gutter should be furnished in a complete unit provided with roof flange, gravel stop (if roof surface is of gravel or slag), and the entire girth of the gutter formed in one continuous sheet of metal, properly hung with roof brackets.

At all exposed eaves metal eave strips must be extended down over the edges of the roof boarding and securely fastened in place and provided with a drip that will expel all the drainage water.

All types of vents, outlets, drains, scuppers and the like, should be properly flashed and installed in a substantial, workmanlike manner.

Where large or heavy ventilators or standpipes or louvers are installed, they should be securely anchored to the underlying roof deck and should not depend for fastening upon the insulation.

WOOD NAILING STRIPS

Where sheet metal flashing aprons and flanges of any nature are used, it will be found of advantage to apply a wood nailing strip the full thickness of the insulation, and 1 in. wider than the aprons to serve as a nailing base for such aprons and flanges. This nailing strip should be rigidly secured to the roof deck with nails, lag bolts, expansion bolts, or similar means of attachment.

SLATE AND TILE WORK

Celotex Roof Insulation constitutes an ideal medium for the insulation of slate and tile roofs.

Application of Celotex Roof Insulation can be handled satisfactorily by the slate and tile contractor. Care should be exercised, however, in application of both slate and tile to fasten joints securely to underlying roof deck.

CONCRETE WORK

Where a roof deck is of concrete, it is important that the roof be uniformly graded and that the surface be finished smooth and level and free from depressions. The concrete should be dry before the insulation layer is applied.

CANT STRIPS

Wherever cant strips are provided along the wall line, the Celotex Roof Insulation should first be installed over the roof deck surface and the cant strips applied over the Celotex Roof Insulation layers.

This also applies on sawtooth curbs, monitor curbs, and the like, where cant pieces are installed.

IMPROVED APPLICATION SUGGESTIONS

Under conditions of unusual severity, and as an added point of quality in roof insulation work, the following suggestions are advanced:

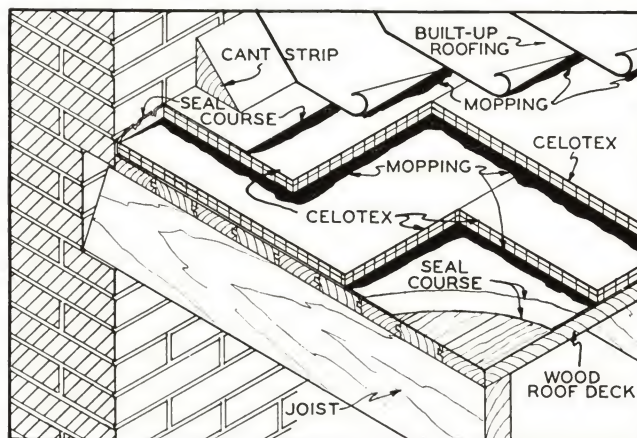
SEAL COURSE—A seal course consisting of one layer of 14-lb. saturated felt, lapped 2 in. and mopped to the deck (or mopped over rosin sized sheathing nailed to wood deck), prior to the application of the Roof Insulation, permits sealing in of the roof shortly after the roof deck is completed, thus protecting the interior of the building from the weather.

By sealing the roof at this time, it is not necessary that the contractor immediately proceed with laying of the insulation and

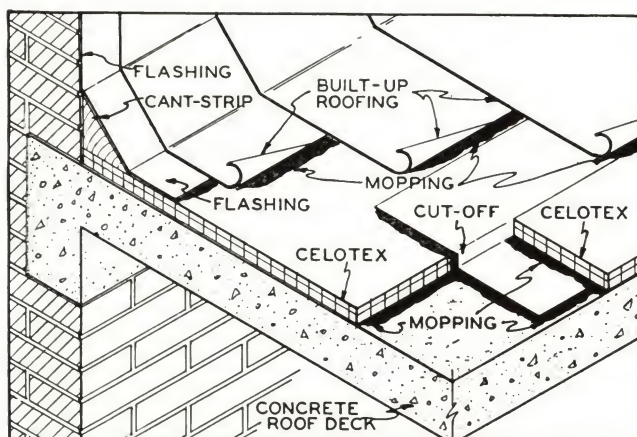
roofing, hence the roofing contractor may select weather most favorable to roofing work, and may be the last trade to work upon the roof, thereby preventing possible damage to the roofing from other trades.

VAPOR CUT-OFF—When high humidities prevail under wood roof decks or steel decks, it is essential that a **vapor-proofing course** be applied over the decks prior to the application of the insulation. This course is heavier than the seal course mentioned above, and is described in detail under section of the Roof Insulation Specifications following.

WATER CUT-OFF—Water cut-offs consist of strips of saturated roofing felt 8 to 10 in. wide, stuck in bitumen to the roof, carried over the edge of the insulation, and stuck to the top surface of the insulation. By installing these water cut-offs approximately 24 in. from and parallel to all vertical walls, such as parapets, pent-houses, skylight curbs, etc., and by dividing the balance of the roof area into rectangular areas approximately 30 ft. on a side, each such area of insulation is thus isolated from adjoining areas. This protection is particularly suggested where high humidities are constantly maintained beneath the deck.



The word Celotex in the drawings above and below indicates Celotex brand Roof Insulation Board



SPECIFICATIONS—INSULATING FLAT ROOFS

CELOTEX ROOF INSULATION UNDER BUILT-UP ROOFING

NOTE: Notes are explanatory or advisory only and should not be included in the specifications.

NOTE: Select and include only those clauses which apply to the particular work. Words in bracketed bold face type are selective.

(1) INSULATING MATERIAL

Insulation shall be [specify] thick Ferox Treated Celotex Roof Insulation laid in [one] [two] layer [s]. Boards shall be 22 inches wide x 47 inches long. Celotex shall be kept dry before, during, and after application.

NOTE: Offset edges are optional in 1 inch and greater thicknesses.

The following roof areas shall be insulated:

NOTE: List and locate. If more than one thickness of insulation is required on various roof areas, list and locate each separately.

(2) GENERAL

All Celotex Fibre Insulation Products shall be kept dry before, during, and after application. Only as much Celotex shall be laid over roof area as can be covered by finished roofing in any one day. Lay Celotex Roof Insulation in [one] [two] layer [s] over entire roof area. Adjoining edges of boards shall be brought to a moderate contact but shall not be forced into place. Where the roof meets vertical surfaces, such as parapets, penthouses, etc., boards shall be cut in a neat, workmanlike manner to insure proper joining without forcing. Boards shall be laid in parallel courses with end joints in each course breaking with those of adjoining courses.

Where insulation is laid in two (2) layers, the boards of the second layer shall be laid parallel with those of the first layer, and the joints of the second layer shall break with those of the first layer.

APPLICATION A—OVER WOOD ROOF DECKS

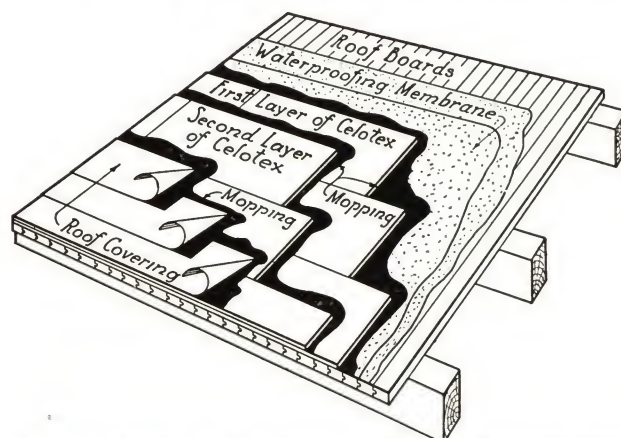
NOTE: This specification applies to insulation against heat loss and to protect against top story excessive summer heat. Where high humidities are maintained, use Application B.

(3) ROOF DECK

The surface of the roof deck shall be broomed clean, free from dirt, loose material, and thoroughly dry. All loose or springy boards shall be properly nailed before insulation is laid.

(4) BUILDING PAPER

NOTE: Use this clause in case the insulation is laid in one layer.



The word Celotex in the drawing above indicates Celotex brand Roof Insulation Board

The entire roof area shall be covered with two (2) plies (lapped half) rosin sized building paper or coated felt. Nail sufficiently to hold in place until the insulation is laid over it.

(5) APPLICATION

(5a) NAILS—Nails shall be of sufficient length to pass through the insulation and penetrate the wood roof deck at least 3/4 inch.

(5b) NAILING—Space nails 12 inches apart. Each board shall be secured in place by nailing along each edge and staggered along the longitudinal center line.

Nailing of two (2) layer insulation shall be through the second or top layer only.

APPLICATION B—OVER WOOD ROOF DECKS WHERE HIGH HUMIDITIES ARE MAINTAINED

NOTE: This specification applies where high humidities are maintained and prevention of condensation is necessary. Where this condition does not exist, use Application A.

(6) ROOF DECK

The surface of the roof deck shall be broomed clean, free from dirt, loose material, and thoroughly dry. All loose or springy boards shall be properly nailed before insulation is laid.

(7) VAPOR CUT-OFF

NOTE: Include over entire roof area in conjunction with roof insulation on wood roof decks over rooms carrying high manufactured or incidental humidities. Select one of the two types specified below—select also, dependent on the type of finished roofing specified—pitch or asphalt.

(7a) Over the wood roof deck first lay a layer of coated (rosin sized) building paper lapped 2 inches at joints and nailed sufficiently to hold in position. Over the building paper lay two (2) plies (lapped half) of 14 lb. saturated roofing felt. Nail the back edge of each sheet with tin-capped, galvanized, barbed roofing nails spaced 12 inches on center. All laps shall be mopped back 12 inches with hot [coal tar pitch] [asphalt]. Do not mop over this membrane until just prior to the laying of insulation.

NOTE: Specify pitch with tar saturated felt and asphalt with asphalt felt.

(7b) Over the wood roof deck lay two (2) plies (lapped half) of 34 lb. per square prepared asphalt roofing having one side coated. Lay coated side down. Nail the back edge of each sheet with tin-capped, galvanized, barbed roofing nails spaced 12 inches on center. All laps shall be mopped back 12 inches with hot asphalt. Do not mop over this membrane until just prior to the laying of insulation.

(7c) Wrap the vapor cut-off around edge and mop back 6 inches on top of insulation at walls, skylight curbs, and under monitor skylight sash.

(8) APPLICATION

Mop the exposed vapor cut-off felt liberally with hot [coal tar pitch] [asphalt]. Only sufficient area to provide complete embedment of each Celotex board shall be mopped at a time. Embed each board firmly in the bituminous mopping.

(8a) TWO LAYER INSULATION—Mop exposed surface of first layer liberally with hot [coal tar pitch] [asphalt]. Only sufficient area to provide complete embedment of each board shall be mopped at a time. Embed each board of second layer firmly in the bituminous mopping.

NOTE: Specify pitch with tar saturated felt and asphalt with asphalt felt.

APPLICATION C—OVER CONCRETE, THERMAX*, GYPSUM AND UNIT TILE

NOTE: Where high humidities are maintained, use vapor cut-off as in paragraph (12).

(9) ROOF DECK

(9a) **GENERAL**—The surface of the roof deck shall be reasonably smooth without depressions, broomed clean, free from dirt and loose material, and thoroughly dry.

(9b) UNIT TILE CONSTRUCTION

—The joints of all tiles shall be properly pointed up.

NOTE: Include (9b) where deck is of cement, gypsum, book or similar construction.

(10) APPLICATION

(10a) **PRIMING THE DECK**—Prime the deck with asphalt primer.

NOTE: Include priming if asphalt mopping and asphalt felt are used for seal course. If pitch and felt are used, no primer is necessary. Use a liberal coating of waterproof primer over gypsum decks.

NOTE: No priming is necessary over Thermax.*

(10b) **MOPPING THE DECK**—[Mop the entire roof area] [spot

or strip mop the individual tiles or units] with a coat of hot [coal tar pitch] [asphalt]. Only sufficient area to provide complete embedment of each Celotex board shall be mopped at a time. Embed each board firmly in the bituminous mopping.

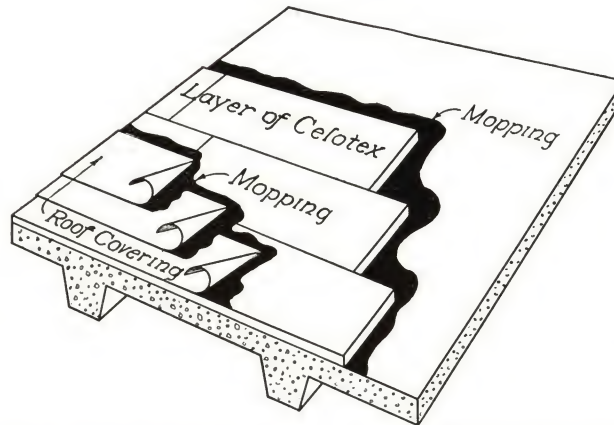
NOTE: Specify pitch with tar saturated felt and asphalt with asphalt felt.

NOTE: If the deck is monolithic construction, (concrete, poured gypsum), the mopping shall be continuous. If the deck is of precast units (book tile, precast gypsum, concrete), coat the entire surface with a light and uniform mopping of asphalt; if coal tar pitch is used, spot or strip mop the individual units, keeping mopping back 4 inches from joints. Mop tile so as to prevent drippage.

NOTE: When applied over Thermax* Celotex Roof Insulation shall be laid at right angles to the longitudinal direction of the Thermax. The insulation shall be spot mopped with 180° to 200° M.P. asphalt and tacked at corners with 1¼ inch barbed roofing nails.

(10c) TWO LAYER INSULATION

NOTE: Same as paragraph (8a) under Application B on page 8.



The word Celotex in the drawing above indicates Celotex brand Roof Insulation Board

APPLICATION D—OVER STEEL ROOF DECKS

(11) ROOF DECK

The steel deck shall be securely anchored to the roof purlins and all joints shall be made rigid.

(12) VAPOR CUT-OFF

NOTE: Include this seal course if the rooms beneath the roof carry high humidities.

Mop entire roof area with a coat of hot asphalt. Over the mopping, while hot, lay two (2) plies (lapped half) of 14-lb. saturated roofing felt. Wrap vapor cut-off around edges of insulation and mop back 6 inches at walls, skylight curbs, and under monitor skylight sash. Do not mop over this membrane until just prior to laying of insulation.

(13) APPLICATION

Mop the [deck] [vapor cut-off] with a liberal coat of hot asphalt. Only sufficient area to completely embed each Celotex board shall be mopped at a time. Embed each board firmly.

(13a) **TWO LAYER INSULATION**—Mop the exposed surface of the first layer liberally with hot asphalt. Only sufficient area to provide complete embedment of each Celotex board shall be mopped at a time. Embed each board of the second layer firmly in the bituminous mopping.

(13b) **FOR STEEP DECKS**—In addition to the mopping, each Celotex board shall be secured to the steel deck, along the top, with three (3) bolts, metal darts, sheet metal screws or other effective device.



* **THERMAX** This trade mark identifies a slab composed of long tough wood shreds completely coated with fire resisting cement, manufactured and sold by the Celotex Corporation.

CELOTEX PROTECTION BOARD

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DESCRIPTION—Ferox-treated Celotex Cane Fiber Insulation Board impregnated with selected bitumens by a special process.

SIZE, THICKNESS, ETC.—Units are unpainted, 24½ x 49 in. in area, ¼ and ½ in. thick. Edges are square.

RECOMMENDED USES—Celotex Protection Board has two major uses—as resilient cushioning under wood block flooring and to reduce sound transmission and drum effect (see Celotex Insulation Catalog), and as protection of waterproofing courses.

Waterproofing courses of saturated felt and asphalt or pitch must be carefully safeguarded against mechanical injury until they are permanently enclosed by masonry or some other protective construction. Such membranes are constructed to resist hydrostatic pressures; if they leak at any point, water will penetrate them and their usefulness ceases. A heavy investment may easily be destroyed by a small puncture in the membrane. Celotex Protection Board, applied in pitch or asphalt to the surfaces to be protected, provides an economical method of shielding such membranes from mechanical abrasion or damage.

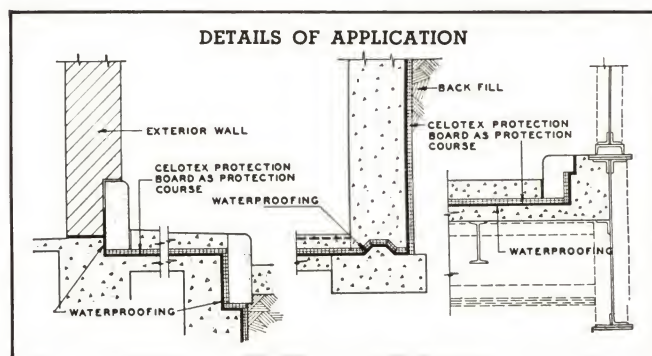
APPLICATION SPECIFICATIONS—WATERPROOFING PROTECTION

(1) **WATERPROOFING**—Waterproofing or dampproofing treatment shall be applied to wall or floor areas in accordance with established specifications.

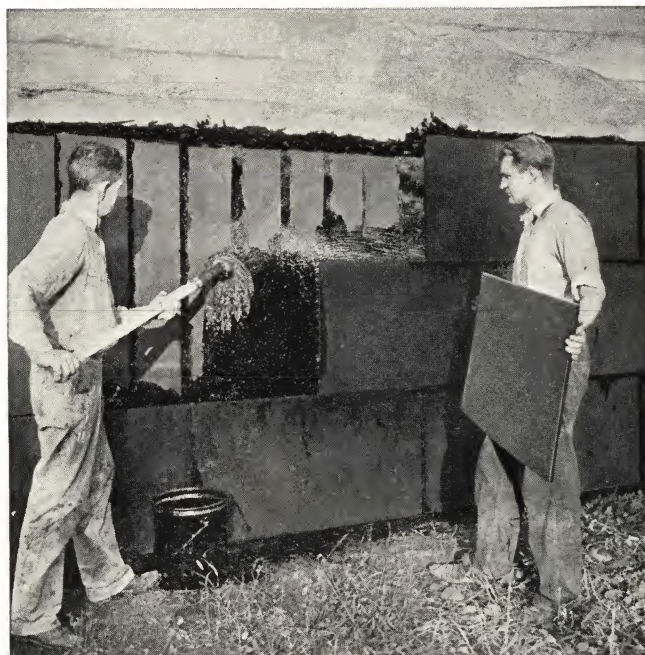
(2) **APPLICATION OF CELOTEX PROTECTION BOARD**—As the waterproofing treatment is given its final mopping, embed a layer of Celotex Protection Board promptly therein with joints broken and all edges in moderate contact.

On vertical surfaces use a wooden mallet to procure over-all contact; on horizontal surfaces press down on all units to insure intimate bond.

(3) **BACK FILL OR MASONRY**—Back filling, laying of finished floor and other subsequent operations should immediately follow application of Celotex Protection Board protection course.



NOTE: For moderate conditions Celotex Roof Insulation may be used. Size, 22 x 47 inches, 1/2 and 1 inch thicknesses.



CELOTEX TRAFFIC TOP

DESCRIPTION—Ferox-treated Celotex Cane Fiber Insulation Board impregnated with selected bitumens by a special process. Edges are slightly beveled.

COLORS—Black, green and red.

SIZES AND THICKNESSES—Units are 12 x 24 in. and 24 x 28 in. in area, $\frac{1}{4}$ and $\frac{1}{2}$ in. thick.

RECOMMENDED USES—Promenade surfaces on roofs, play courts, ramps, aisleways, and other similar surfaces subjected to foot traffic and exposed to the outside weather.

APPLICATION—Celotex Traffic Top shall be installed in strict accordance with the manufacturer's specification by an approved Celotex Traffic Top Distributor.

TYPICAL INSTALLATIONS OF CELOTEX TRAFFIC TOP



At the New York World's Fair, Celotex Traffic Top adds a springy surface to the ramp leading to the Administration Building



Hours of relaxation in fresh air are made possible in congested areas by the application of Celotex Traffic Top on a flat deck



Attractive and comfortable promenade of Celotex Traffic Top at the Cleveland Skating Club



Celotex Traffic Top on play area of Manhattan Shelter, New York City

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CELOTEX

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ROOFING PRODUCTS *Section*

« See INSULATION and ACOUSTICAL *Sections* »